What is Claimed is:

1. A system for adjusting a power level of an optical signal at an input to a component in a network element that forms part of an optical network, the system comprising:

a variable optical attenuator (VOA) for receiving a first optical input signal and producing an attenuated optical output signal, the VOA including a control input to receive control parameters that adjust a VOA attenuation factor;

a signaling channel;

a detector coupled to the input of the component for detecting a power value of a second optical input signal that is derived from the attenuated optical output signal, and wherein the detector is further coupled to the signaling channel and includes logic to transmit the power value on the signaling channel; and

a VOA controller (VOAC) coupled to the VOA and the signaling channel, the VOAC including logic for receiving the power value from the signaling channel and generating selected control parameters that are input to the control input of the VOA for accordingly adjusting the VOA attenuation factor to achieve a selected signal power level at the input to the component.

2. The system of claim 1, wherein the signaling channel comprises a direct connection between the detector and the VOAC.

3. The system of claim 1, wherein the signaling channel comprises a local network coupled to the detector and the VOAC.

4. The system of claim 1, wherein the first optical input signal includes a plurality of signal channels, and wherein the second optical input signal includes a selected portion of the signal channels.

5. The system of claim 1, wherein the attenuated optical output signal is input to a second network component, and the second network component derives the second optical input signal from the attenuated optical output signal.

6. The system of claim 5, wherein the second network component is a demux circuit card located in the network element.

7. The system of claim 1, wherein the component is an optical receiver.

8. The system of claim 1, wherein the network element is a first network element and VOA and the VOAC are located at a second network element, and wherein the signaling channel is part of an optical supervisory channel that extends between the first and second network elements.

9. A method for adjusting a power level of an optical signal at an input to a component in a network element that forms part of an optical network, the method comprising steps of:

attenuating a first optical signal with a VOA to produce an attenuated optical signal, the VOA having a plurality of attenuation factors;

transmitting a second optical signal that is derived from the attenuated optical signal to the input of the component;

detecting a power value for the second optical signal at the input of the component;

selecting one of the VOA attenuation factors based on the power value so that a selected power value is detected at the input of the component.

10. The method of claim 9, further comprising a step of repeating the steps of detecting and selecting until a selected power value is detected at the input of the component.

11. The method of claim 10, wherein the component is an optical receiver.

12. The method of claim 9, wherein the VOA includes a VOA controller (VOAC) and the method further comprises a step of signaling the power value to the VOAC.

13. The method of claim 12, wherein the network element is a first network element and VOA and the VOAC are located at a second network element, and wherein the step of signaling comprises a step of signaling the power value to the VOAC over an optical supervisory channel that extends between the first and second network elements.

14. The method of claim 9, wherein the first optical input signal includes a plurality of signal channels, and wherein the second optical signal includes a selected portion of the signal channels.

15. The method of claim 14, further comprising steps of:

receiving the plurality of signal channels at a demux circuit; and

outputting the selected portion of the signal channels from the demux circuit to the component.